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FLORA AND FUNGA RECORDS

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Notulae to the Italian alien vascular flora: 20

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Abstract

In this contribution, new data concerning the distribution of vascular flora alien to Italy are presented. It includes new records, exclusions, and status changes from casual to naturalized or invasive for Italy or for Italian administrative regions for taxa in the genera *Bidens*, *Ceratochloa*, *Chamaeiris*, *Cylindropuntia*, *Cyperus*, *Euphorbia*, *Freesia*, *Glinus*, *Hydrocotyle*, *Lagunaria*, *Megathyrsus*, *Myriophyllum*, *Opuntia*, *Schinus*, *Sparaxis*, *Sporobolus*, *Talinum*, and *Tradescantia*. Nomenclatural and distribution updates, published elsewhere, and corrections are provided as Suppl. material.

Keywords

Alien species, floristic data, Italy, nomenclature

How to contribute

The text for the new records, status changes from casual to naturalized or invasive, exclusions, and confirmations should be submitted electronically to Lorenzo Lastrucci (lorenzo.lastrucci@unifi.it). The corresponding specimen along with its scan or photograph has to be sent to FI Herbarium: Museo di Storia Naturale (Botanica), Sistema Museale di Ateneo, Via G. La Pira 4, 50121 Firenze (Italy). Those texts concerning nomenclatural novelties and typifications (only for accepted names) should be submitted electronically to Gabriele Galasso (gabriele.galasso@comune.milano.it). Each text should be within 1,000 characters (spaces included).

Floristic records

Bidens radiata Thuill. (Asteraceae)

– **CAM**. – Alien species to be excluded from the flora of Campania.

After reviewing the relevant herbarium specimen (*Herb. A. Croce*!), the record for Roccamonfina (Caserta) by Croce et al. (2008), the only one for Campania (Del Guacchio and La Valva 2017), is to be referred to *B. frondosa* L.

A. Croce, E. Del Guacchio

***Ceratochloa cathartica* (Vahl) Herter (Poaceae)**

+ (NAT) **VDA**: Verrès (Aosta), loc. Chopine (WGS84: 45.671493°N, 7.681890°E), area incolta al margine della strada, 373 m, 21 May 2025, *M. Lonati, G. Nota* (FI). – Status change from casual to naturalized alien for the flora of Valle d'Aosta.

This species was previously reported in the lower and middle Aosta valley as rare but potentially expanding (Bovio et al. 2006; Bovio 2014). At present, the numerous populations between Montjovet and Bard support the complete naturalization of the species in Valle d'Aosta.

M. Lonati, G. Nota

***Chamaeiris orientalis* (Mill.) M.B.Crespo (Iridaceae)**

+ (NAT) **LOM**: Sesto Calende (Varese), loc. Tortorino, Viale Lombardia, sponda del Rio Capricciosa (WGS84: 45.730040°N, 8.628310°E), sponda di torrente, 204 m, 27 May 2025, leg. et det. *E. Meneguzzo*, conf. *N.M.G. Ardenghi* (FI, *Herb. E. Meneguzzo*). – Status change from casual to naturalized alien for the flora of Lombardia.

After several years many lush plants have been observed in full bloom for the first time. The population occupies an area of approximately 10 m^2. An eastern Mediterranean species, it is known as a casual alien to other Lombard provinces (Banfi and Galasso 2010; Gariboldi 2023).

E. Meneguzzo, N.M.G. Ardenghi

***Cylindropuntia imbricata* (Haw.) F.M.Knuth subsp. *spinosior* (Engelm.) M.A.Baker, Cloud-H. & Majure (Cactaceae)**

+ (NAT) **TAA**: Merano (Bolzano), punto panoramico sulla cascata Gilfpromenade, lungo una scarpata rocciosa inaccessibile, all'interno di una gola sul Fiume Passirio (WGS84: 46.673056°N, 11.171667°E), scarpata rocciosa in associazione con *Opuntia engelmannii* e *O. humifusa*, ca. 350 m, SE, 5 September 2024, leg. *K. Kompatscher*, det. *A. Guiggi* (photo in FI). – Naturalized alien subspecies new for the flora of Trentino-Alto Adige.

K. Kompatscher, A. Guiggi

***Cyperus esculentus* L. (Cyperaceae)**

+ (NAT) **MAR**: Falconara Marittima (Ancona), litorale (WGS84: 43.620770°N, 13.420020°E), dune embrionali, suolo sabbioso, 2 m, 19 June 2025, leg. *M. Camil-*

letti, det. *G. Quattrini* (FI, PESA). – Naturalized alien species new for the flora of Marche.

This species was recorded on sandy soils with an expanding population of several dozen individuals scattered across a psammophilous grassland dominated by *Thinopyrum junceum* (L.) Á.Löve. The densest and most significant part of the population is found along the margins and within a drainage channel crossing the area, hosting the largest individuals, which were also in bloom at the time of observation. The habitat appears generally degraded, with a significant presence of other alien species, such as *Oenothera adriatica* Soldano and *Cenchrus longispinus* (Hack.) Fernald.

M. Camilletti, G. Quattrini

Euphorbia lathyris L. (Euphorbiaceae)

+ (NAT) **LAZ**: Torrita Tiberina (Roma), incolto tra Via del Plebiscito e Contrada Valli (WGS84: 42.236282°N, 12.619328°E), incolto, 170 m, 6 April 2025, *M. Giardini* (FI). – Status change from casual to naturalized alien for the flora of Lazio.

In the administrative region of Lazio, this species was reported for the Cimini and Lepini mountains, Mount Scalambra, Castelli Romani (Anzalone et al. 2010), and some other localities (Lucchese 2024). In the site of Torrita Tiberina, the species, perhaps initially cultivated as ornamental, currently seems able to reproduce without human intervention. A dense population with more than 150 individuals was found over an area of about 400 m^2.

M. Giardini

Freesia leichtlinii Klatt subsp. *alba* (G.L.Mey.) J.C.Manning & Goldblatt (Iridaceae)

+ (INV) **ITALIA** (**SAR**): Castiadas (Sud Sardegna), Olia Speciosa (WGS84: 39.281638°N, 9.530305°E), nei prati e nel sottobosco della pineta, 50 m, 22 March 2024, *L. Podda* (CAG); La Maddalena (Gallura Nord-Est Sardegna), Isola Giardinelli (WGS84: 41.231377°N, 9.438351°E), prati e garighe su sabbbie granitiche, 5 m, 30 May 2024, *M. Fois, A. Cuena-Lombraña* (FI, CAG). – Status change from naturalized to invasive alien for the flora of Italy; status change from casual to invasive alien for the flora of Sardegna.

This taxon, native to South Africa, has been cultivated elsewhere for its eye-catching flowers. However, it is able to disperse and reproduce without human intervention. A diffuse population with thousands of flowering individuals was found in the municipality of La Maddalena. A similar situation is observable near Castiadas, where hundreds of plants have colonized the undergrowth of coastal pinewoods, as well as along the western coast, from Marina di Arborea to S'Ena Arrubia (municipality of Arborea, province of Oristano), where it is currently invading several sites. *Freesia leichtlinii* subsp. *alba* has also been observed in Cagliari, on the hill of Sant'Elia (loc. Calamosca),

where it is spreading along paths, likely originating from abandoned garden remnants in adjacent areas.

M. Fois, A. Cuena-Lombraña

Glinus lotoides L. (Molluginaceae)

+ (NAT) **PUG**: Gravina in Puglia (Bari), Bosco Difesa Grande, loc. Lago Carbonara (WGS84: 40.735179°N, 16.430330°E), prateria annuale pascolata ai margini di uno stagno temporaneo, 462 m, 10 October 2023, leg. *V. Tomaselli, E. Costanzo*, det. *V. Tomaselli* (FI, BI No. 59759). – Naturalized alien species new for the flora of Puglia.

About a dozen individuals have been found in a periodically submerged area subject to grazing and livestock trampling. Most of the observed individuals were abundantly flowering and producing fruits.

V. Tomaselli, E. Costanzo

Hydrocotyle verticillata Thunb. (Araliaceae)

+ (INV) **ITALIA** (**LAZ**): Anguillara Sabazia (Roma), Lago di Bracciano, spiaggia di Via R. Belloni (WGS84: 42.091025°N, 12.262163°E), water–land interface, sandy substrate, within a community belonging to habitat type "3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*", 162 m, 27 August 2025, leg. *E. Argenti*, det. *M.M. Azzella* (FI). – Invasive alien species new for the flora of Italy (Lazio).

Hydrocotyle verticillata, native to the Americas and sub-Saharan Africa (POWO 2025b [onwards]), was identified using the dichotomous key in Schou et al. (2023). This species is naturalized along the shores of Lake Bracciano, where it exhibits a high capacity for spread and colonization, suggesting invasiveness. It was first collected in September 2024 on the southern shore of the lake by E. Argenti. By the summer of 2025, it was observed at many sites of the lake (e.g.: Bracciano [Roma], WGS84: 42.136641°N, 12.182748°E; Trevignano Romano [Roma], WGS84: 42.149418°N, 12.263401°E). It is abundant in the managed lawns of beach clubs and thrives at the water–land interface, where it co-occurs with *Ludwigia hexapetala* (Hook. & Arn.) Zardini, H.Y.Gu & P.H.Raven, colonizing the front zones of helophyte communities. This expansion threatens native communities, particularly that characteristic of habitat type "3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*".

M.M. Azzella, E. Argenti

Lagunaria patersonia (Andrews) G.Don (Malvaceae)

+ (NAT) **ITALIA** (**PUG**): Vernole (Lecce), Riserva Biogenetica San Cataldo (WGS84: 40.378575°N, 18.309490°E), bosco, 3 m, 30 April 2025, leg. *L. Quaranta*, det. *L.*

Quaranta, P. Fortini (FI, IS). – Status change from casual to naturalized alien for the flora of Italy; naturalized alien species new for the flora of Puglia.

In the heart of the San Cataldo Biogenetic Nature Reserve, two mature, fruiting specimens were found: one approximately 8 m tall, and the other 4 m tall, located 60 m one from the other. In addition, a seedling (two-three years old with a woody base) was found about 20 m away. One specimen was found near a footpath in the reserve, which creates a gap in the forest cover, while the second specimen and the seedling were found further inside the forest.

L. Quaranta, P. Fortini

***Megathyrsus maximus* (Jacq.) B.K.Simon & S.W.L.Jacobs (Poaceae)**

+ (NAT) **CAL**: Scilla (Reggio Calabria), alla base delle rupi in prossimità del Castello Ruffo (WGS84: 38.256259°N, 15.715098°E), in contesto di macchia mediterranea con molte specie dell'*Oleo-Ceratonion siliquae*, 5 m, 18 June 2025, *E. Bajona* (FI, PAL). – Naturalized alien species new for the flora of Calabria.

Two varieties of *Megathyrsus maximus* are known in Italy: the autonymic one (*M. maximus* var. *maximus*), with completely glabrous lemmas, and *M. maximus* var. *pubiglumis* (K.Schum.) B.K.Simon & S.W.L.Jacobs, characterized by haired lemmas (Banfi et al. 2022). Self-replacing populations of this latter variety are widespread in the recorded locality. As a tropical grass, its phenology and vegetative growth in a Mediterranean climate are concentrated during the temperate rainiest months (late spring and autumn).

E. Bajona

***Myriophyllum aquaticum* (Vell.) Verdc. (Haloragaceae)**

+ (NAT) **SAR**: Arzachena (Gallura Nord-Est Sardegna), strada SP59, in prossimità di Riu di San Giovanni d'Arzachena (WGS84: 41.07489°N, 9.44506°E), corpo idrico con acque ferme o lentamente fluenti, poco profonde, 7 m, 17 April 2025, leg. *V. Lozano, G. Brundu*, det. *G. Brundu* (FI, *Herb. Uniss Agraria*); Serdiana (Cagliari), Rio Flumineddu, loc. Is Paulis (WGS84: 39.390442°N, 9.124203°E), 131 m, ambiente acquatico su alluvioni, 13 June 2025, *G. Bacchetta, L. Podda, A. Lallai* (FI, CAG). – Naturalized alien species new for the flora of Sardegna.

Myriophyllum aquaticum is a perennial hydrophyte native to South America, including Argentina, southern Brazil, Bolivia, Chile, Colombia, Paraguay, Peru and Uruguay, introduced for ornamental purposes and now widespread in many parts of the world (Lafontaine et al. 2013; Lastrucci et al. 2018). It is listed among the invasive alien species of Union concern under Regulation (EU) n. 1143/2014. This species was found in a stretch of the Flumineddu stream, forming a dense population extending over a few dozen meters. In 2025, the authors were informed by the Sardinian Assessorato della Difesa dell'Ambiente of an iNaturalist record dated 2018 and an inspection confirmed the persistence of the alien plant. A second stand was found in Arzachena. The individuals observed in Sardegna (female plants) probably originated

from plants introduced commercially for aquariums and ponds and then accidentally discarded from there into natural habitats.

V. Lozano, G. Brundu, G. Bacchetta, L. Podda

***Opuntia lindheimeri* Engelm. (Cactaceae)**

+ (NAT) **UMB**: Spello (Perugia), fraz. Capitan Loreto, strada SS75bis Foligno-Perugia, prima dell'uscita per Capitan Loreto direzione Perugia, sommità della scarpata destra (WGS84: 43.017289°N, 12.647450°E), scarpata stradale, 210 m, SW, 22 February 2022, leg. *R. Venanzoni*, det. *F. Lucchese, A. Guiggi* (FI, PERU barcode PERU-2110). – Status change from casual to naturalized alien for the flora of Umbria.

A depaupered *exsiccatum* characterized by the absence of reproductive elements was previously erroneously identified as *Opuntia engelmannii* Salm-Dyck ex Engelm. (Galasso et al. 2022). This population was already correctly recorded by Falcinelli et al. (2016), but at the time it was considered only as casual.

F. Lucchese, A. Guiggi, F. Falcinelli

***Opuntia microdasys* (Lehm.) Pfeiff. (Cactaceae)**

+ (NAT) **CAL**: Badolato (Catanzaro), Corso Umberto I, nei pressi della Chiesa dell'Immacolata (WGS84: 38.567527°N, 16.528949°E), sulle scarpate stradali, 185 m, 4 August 2025, *S. Pirani, S. Ravetto Enri* (FI). – Naturalized alien species new for the flora of Calabria.

This species was observed on the steep slopes of the promontory linking the village of Badolato to the ancient 'Chiesa dell'Immacolata'. The first individuals likely originated from plant material discarded by the gardens of the nearby settlement above. The population is now expanding, on both sides of the promontory, via asexual propagation of detached pads which fracture off, tumble downslope, and establish new, stable clusters.

S. Pirani, S. Ravetto Enri

***Schinus terebinthifolia* Raddi (Anacardiaceae)**

+ (NAT) **ITALIA** (**SAR**): San Teodoro (Gallura Nord-Est Sardegna), Via della Laguna (WGS84: 40.784673°N, 8.658453°E), margini stagno, cigli stradali, 1–2 m, 23 January 2025, *G. Calvia* (FI, *Herb. G. Calvia*). – Status change from casual to naturalized alien for the flora of Italy (Sardegna).

This species is native to Brazil but currently occurring in more than 20 countries worldwide, especially in Florida (USA) and South Africa (Martin et al. 2020). In Sardegna, its presence was recorded as a casual alien by Puddu et al. (2016). In January 2025, we observed that several adult and abundantly fruiting shrubs, up to 3–4 m tall, were thriving along the edges of the San Teodoro pond. These have certainly escaped from a few trees previously planted as road trees along the street leading to La Cinta Beach. We also noted abundant seedlings in the vicinity. Considering the potential invasiveness of

the species in coastal wetlands, as evidenced by Myrtinger and Williamson (1987) for Florida's Everglades, interventions should be made to contain its expansion.

G. Calvia, A. Ruggero

***Sparaxis tricolor* (Schneev.) Ker Gawl. (Iridaceae)**

+ (NAT) **ITALIA** (**SAR**): San Teodoro (Gallura Nord-Est Sardegna), Lu Sitagliacciu (WGS84: 40.790216°N, 9.598460°E), ciglio stradale, 122 m, 3 April 2025, *G. Bertotto, G. Calvia* (FI, *Herb. G. Calvia*). – Status change from casual to naturalized alien for the flora of Italy (Sardegna).

This South African plant is frequently cultivated for its showy flowers. However, as in many other cases, it is able to spread and colonize nearby areas without human intervention. The first report for this species in Sardegna and Italy, in the municipality of Gonnesa (Podda et al. 2012), is here confirmed as naturalized. Moreover, we found the species growing along roadsides in the municipality of San Teodoro. Its potential to colonize new sites has been closely monitored in a garden at Berchidda (Gallura Nord-Est Sardegna), where this species was planted in a flowerbed nearly 30 years ago. Since then, the species has colonized the rest of the garden and some plants were able to escape, being removed twice by neighbouring landowners.

G. Bertotto, G. Calvia

***Sporobolus indicus* (L.) R.Br. (Poaceae)**

+ (NAT) **VDA**: Pont-Saint-Martin (Aosta), lungo la strada SS26 della Valle d'Aosta (WGS84: 45.5880°N, 7.8018°E), aiuola a bordo strada, 310 m, 21 August 2025, *E. Bonivento* (FI). – Naturalized alien species new for the flora of Valle d'Aosta.

Several individuals were found in a roadside flowerbed. This species has also been observed in a parking area in Donnas (Aosta, WGS84: 45.6023°N, 7.7595°E), along the flowerbed borders and in the pavement cracks. The vector of introduction in Valle d'Aosta is probably the transit of vehicles from the nearby administrative region of Piemonte.

E. Bonivento

***Talinum paniculatum* (Jacq.) Gaertn. (Iridaceae)**

+ (NAT) **ITALIA** (**SAR**): Cagliari (Cagliari), Via del Fossario (WGS84: 39.217320°N, 9.116578°E), lungo gli anfratti dei muri, marciapiedi e bordi strada, su calcari miocenici, 67 m, 28 April 2025, *A. Lallai, M. Sarigu, L. Podda* (FI, CAG). – Status change from casual to naturalized alien for the flora of Italy (Sardegna).

In Italy, *Talinum paniculatum* is reported as a casual species in several central and southern administrative regions (Scafidi and Raimondo 2017), and also in Sardegna by Podda et al. (2012). Currently, the population found in Cagliari has expanded and is self-sustaining.

A. Lallai, M. Sarigu

Tradescantia pallida (Rose) D.R.Hunt (Commelinaceae)

+ (NAT) **ITALIA** (**SIC**): Palermo (Palermo), Corso A. Amedeo (WGS84: 38.117583°N, 13.350820°E), negli interstizi dei marciapiedi, 28 m, 7 May 2025, *E. Di Gristina* (FI, SAF No. 100155). – Status change from casual to naturalized alien for the flora of Italy (Sicilia).

Tradescantia pallida is so far reported as a casual alien in Sicilia (Galasso et al. 2018b). In Palermo, we observed numerous plants of various ages, including some in bloom, growing in the interstices of the sidewalks both in the city centre and in residential areas (Corso A. Amedeo, Viale Campania, Viale del Fante, Corso C. Finocchiaro Aprile, Via G.B. Guccia, Via G. La Farina, Via C. Lascaris, Viale Lazio, Via F. Parlatore, Via P. Ranzano, Via G. Sciuti, and Via A. Veneziano). *Tradescantia pallida* is thus recognized as a naturalized species in Sicilia.

E. Di Gristina, G. Barone

Nomenclatural and distribution updates from other literature sources

Nomenclatural, status, and distribution updates according to Mattei (1886), Gola (1910), Webb et al. (1988), Giardina et al. (2007), Buccomino et al. (2011), Clement (2012), Gestri and Peruzzi (2013), Crespo (2015), Galasso (2015), Lazzeri (2017), Minissale and Sciandrello (2017), Galasso et al. (2018a), Reichert et al. (2018), Särkinen et al. (2018), Kotiya et al. (2020), Feng et al. (2021), Bagli et al. (2023), Fraser-Jenkins et al. (2023), Gestri et al. (2023), Lucchese (2023), Martínez et al. (2023), De Bellis et al. (2024), Antonietti et al. (2025), Argenti (2025), Banfi (2025), Bonali (2025), Calvia et al. (2025), Cardoso et al. (2025), Coltri et al. (2025), Da Pozzo et al. (2025), De Castro et al. (2025), De Luca and De Castro (2025), de Vos et al. (2025), Dellavedova et al. (2025a, b), Domina et al. (2025), Elerdini et al. (2025), Galasso (2025), Galasso and Banfi (2025), Galasso et al. (2025), IPNI (2025 [onwards]), Leoni et al. (2025), Lonati et al. (2025), Marenzi and Bonali (2025), Mazzi and Truzzi (2025), Mei and Wellstein (2025), Mondello et al. (2025), O'Leary and Moroni (2025), Peruzzi et al. (2025), Pinzani et al. (2025), POWO (2025a [onwards], 2025c [onwards], 2025d [onwards], 2025e [onwards]), 2025f [onwards]), Roma-Marzio et al. (2025), Soldano (2025), Wu et al. (2025), Zero (2025), and corrections to Galasso et al. (2024), available at the Portal to the Flora of Italy (2025), are provided in Suppl. material 1.

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Supplementary material 1

Supplementary data

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Data type: pdf

Explanation note: 1. Nomenclatural updates; 2. Note updates; 3. Distribution updates; 4. Synonyms, misapplied or included names.

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